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10/636,158	08/07/2003	Roderick MacRae	18047	3609
26794	7590 11/17/2004		EXAMINER	
TYCO ELECTRONICS CORPORATION			FAULK, DEVONA E	
	INDEN HILL ROAD, SUITE 450 DN, DE 19808 ART UNIT		PAPER NUMBER	
	,		2644	
			DATE MAILED: 11/17/2004	4

Please find below and/or attached an Office communication concerning this application or proceeding.

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Application No.	Applicant(s)	1
10/636,158	MACRAE, RODERICK	
Examiner	Art Unit	
Devona E. Faulk	2644	
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Paper N 5) Notice of	o(s)/Mail Date f Informal Patent′Application (PTO-152)	
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DETAILED ACTION

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Claim Objections

1. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 9 claims the microphone enclosure of claim 5 but recites the exact claim language as claim 5.

Claim Rejections - 35 USC § 112

2. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 claims the portable radio of claim 8, but claim 8 does not claim a portable radio but a microphone enclosure. Claim 12 claims the portable radio of claim 5, but claim 5 does not claim a portable radio but a microphone enclosure.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3, and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Akino (U.S. Patent 6,148,089).

Regarding **claim 1**, Akino discloses a microphone enclosure comprising a casing (F; Figure 2B; column 4, lines 14-25) for containing a microphone (2, Figure 2B; column 4, lines

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14-25) for receiving sound and converting said sound into at least one electrical signal (Figure 2B); and at least one inlet for allowing sound to reach said microphone; said at least one inlet having a plurality of openings (4, acoustic terminals, Figure 2B; les, 24; column 4, lines 13,49-51) forming at least one tortuous path therein (Figure 2B).

All elements of claim 2 are comprehended by claim 1 (4, acoustic terminals; Figure 2B).

All elements of claim 3 are comprehended by claim 2 (Figure 2B).

All elements of **claim 5** are comprehended by claim 1 (5, waterproof film, Figures 11A and 11B).

All elements of **claim 7** are comprehended by claim 5. Therefore, claim 7 is rejected for reasons given above apropos of claim 5.

All elements of **claim 8** are comprehended by claim 5. Therefore, claim 8 is rejected for reasons given above apropos of claim 5.

Regarding **claim 6**, Akino discloses a microphone enclosure comprising a casing (F, Figure 2B) for containing a microphone (2; Figure 2B; column 4, lines 14-25) for receiving sound and converting said sound into at least one electrical signal (, Figure 1); an first opening proximate said microphone (4, acoustic terminals; Figure 2B; column 4, lines 13, 49-51); a second opening proximate said microphone (4, Figure 2B); and at least one inlet formed by a convergence of said first opening and said second opening (24; Figure 2B) for allowing sound to impinge upon said microphone.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akino (U.S. Patent 6,148,089) in view of Hood et al. (U.S. Patent Application 2003/0072131).

Claim 4 claims the microphone enclosure of claim 1 and claim 8 claims the microphone enclosure of claim 5, wherein said microphone enclosure further contains a circuit board; integrated components on said circuit board for receiving signals from said microphone; and an antenna in communication with said integrated components for transmitting said electrical signal. As stated above apropos of claim 1 and 5, Akino meets all elements of that claim. Therefore, Akino meets all elements of claims 4 and 8 with the exception of an antenna as claimed. An integrated circuit board is inherently present but Akino fails to disclose an antenna in communication with said integrated components for transmitting said electrical signal. Hood discloses a notebook computer with an antenna (164, 174; Figures 1 and 2; page 2, paragraph 0017, 0028) as claimed. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Hood's concept of an antenna to provide for wireless transmission.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (U.S. Patent 6,525,854) in view of Akino (U.S. Patent 6,148,089)

Regarding claim 10, Takahashi discloses a portable radio (Figures 1 and 4A) comprising a circuit board (Figure 1, obvious); integrated components on said circuit board for transmitting and receiving signals to and from said portable radio (Figure 2); an antenna (1; Figures 1 and 4A) in communication with said integrated components for transmitting and receiving said signals (Figure 1); a microphone (5) in communication with said integrated components on said

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circuit board for converting between sound and electrical signals; a casing for containing a microphone, said integrated components, and said circuit board (Figure 4A). Takahashi fails to disclose a first and second opening and at least one inlet as claimed. However, this concept was well known in the art at the time of filing as taught by Akino. Akino discloses a first opening (4, acoustic terminals; Figure 2B; column 4, lines 13, 49-51) in said casing proximate said microphone (2, Figures 2B); a second opening (4, acoustic terminals; Figure 2B) in said casing proximate said microphone (2, Figure 2B), and at least one inlet formed by a convergence of said first opening and said second opening for allowing sound to impinge upon said microphone (Figure 2B). Thus it would have been obvious to one of ordinary skill in the art to use Akino's concept of a microphone enclosure in order to make the directivity to be directed to the mouth of the speaker.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 703-305-4359. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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